



## Indoor Air Quality Tools for Schools Program

Indoor Air Quality (IAQ)

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### NEWS AND EVENTS

- **Learn Strategies for Managing Asthma in Schools:** Attend the [2011 Communities in Action National Asthma Forum](#) to network and learn best practices from national asthma experts. The Forum is June 9–10, 2011, in Washington, D.C. [Register today!](#)
- **Discover the Value of Healthy School Environments:** [Watch a video](#) featuring U.S. EPA Administrator Lisa Jackson, Healthy School Network's Executive Director Claire Barnett and Montgomery County, Md., public school officials on National Healthy Schools Day as they highlight the importance of creating healthy school environments.
- **Save Your School Money by Going Green:** A typical green school reduces direct costs by \$100,000 per year, while improving student health and performance. For more information on the benefits of going green at school, visit the U.S. Green Building Council's [Green School Buildings website](#).

### PROTECT AGAINST RADON AT YOUR SCHOOL

The average American spends 90 percent of his or her time indoors — for students and staff, that equals a significant amount of time spent inside of school buildings. Even though you may be taking steps to protect your school community from environmental and health risks, you may be overlooking an unsuspected pollutant. [Radon](#), a natural, radioactive gas that enters buildings through cracks and openings in the foundation, is one of the most hazardous indoor pollutants. An estimated 20,000 people die each year from radon-induced lung cancer. In fact, it is the public's second leading cause of lung cancer and the number one cause among never smokers. To be successful, school IAQ management programs must include effective source control of all indoor air pollutants, including radon.

#### Did You Know...

##### May is Asthma Awareness Month?

Asthma is a serious, potentially life-threatening disease that affects the quality of life for approximately 7 million children nationwide and accounts for 10.5 million missed school days each year. Take action during [Asthma Awareness Month](#) to help raise awareness about asthma triggers and how to prevent asthma attacks at your school.

##### Should we have our schools tested for radon? Can air fresheners trigger students' asthma?

Have these and other questions answered on the Schools IAQ Connector Email Discussion List. Join today by sending a blank email message to [schools\\_iaq\\_connector-subscribe@lists.epa.gov](mailto:schools_iaq_connector-subscribe@lists.epa.gov). Then check your email inbox for your confirmation and membership details.

#### Access Past E-Newsletters Online

Can't find a past *IAQ Tools for Schools* Connector e-newsletter in your email inbox? No problem! Wish you could read past editions? You can! Visit the [e-newsletter archive](#) to access printable versions (PDF) of all past editions on the *IAQ Tools for Schools* website.

**Since you cannot smell or see radon, the only way to know if you have elevated radon levels in your buildings is to test.** These tests are simple to conduct and are the only way schools can determine if direct actions are needed to reduce occupants' risk. Use the tips below from the [Framework for Effective School IAQ Management](#) to develop a system to manage radon at your school.

- **Organize for Success:** To secure senior-level buy-in, partner with parent groups, local health departments and other organizations to build support and understanding for why radon testing is important. Then integrate radon management into the school's or district's overall health and environmental program goals and assemble your team to plan for radon testing and potential mitigation.
- **Communicate with Everyone All the Time:** Integrate radon awareness into your existing IAQ training and education efforts. Ensure you are transparent and inclusive — share test results, mitigation plans and plans for follow-up testing with parents, school staff and others in the community.
- **Assess Your Environments Continuously:** Incorporate radon testing into regular IAQ walkthroughs. After reviewing floor plans, determine how many radon test kits are necessary and where you should place the kits for useful results. Track all assessment data and results for record keeping.
- **Act to Address Structural, Institutional and Behavioral Issues:** [Test your school buildings](#). If elevated levels are found — at or above EPA's recommended 4 pCi/L (picocuries per liter) action level — contact your [state radon office](#) ([www.epa.gov/radon/wheretheyoulive.html](http://www.epa.gov/radon/wheretheyoulive.html)) for mitigation recommendations. (Some states have specific guidelines on who can mitigate schools.)
- **Plan Your Short and Long-Term Activities:** Work with your team to identify your action steps in terms of testing and mitigation, including what type of test kits to use and which areas to test. Consult your state radon program for guidance on prioritizing action steps, determined by funding and staff resources.
- **Evaluate Your Results for Continuous Improvement:** Ask for feedback from the team, parents and others in the community regarding the radon management process. Identify best practices for improving the process for future follow-up tests.

For more detailed guidance on radon testing and mitigation in schools, download EPA's [Managing Radon in Schools document](#). This document details key strategies that successful school districts have implemented. It also includes a list of useful resources.

EPA 402F/10001 | June 2010 | [www.epa.gov/iaq](http://www.epa.gov/iaq)





## Managing Radon in Schools

The Indoor Air Quality Tools for Schools Approach:  
Key Drivers and Strategies for Success

**Successful school IAQ management programs are works in progress, and most districts put the components of success in place over time. The "Framework for Effective School IAQ Management: Key Drivers" is a system enhanced by continuous reinforcement. Implementation of one Key Driver will support and contribute to the development of another.**

Strategies that support the Key Drivers complement this positive feedback loop. Overall program efficacy increases as school districts incorporate each Key Driver into their programs. This document describes how the "Framework for Effective School IAQ Management: Key Drivers" displayed in the graphic can help schools address radon risks as part of a comprehensive IAQ management program.

Successful IAQ management in schools comprises effective pollution source control. Radon — a radioactive gas — is one of the most hazardous indoor pollutants. Radon is the leading cause of lung cancer among non-smokers. In the U.S., an estimated 20,000 people die from radon-induced lung cancer annually. Thousands of classrooms nationwide have elevated radon levels, needlessly exposing hundreds of thousands of students and staff to this serious health risk.

**EPA recommends testing all schools for radon.** As part of an effective IAQ management program, schools can take simple steps to test for radon and reduce risks to occupants if high radon levels are found. The only way to know if elevated radon levels are present is to test. Many schools have successfully applied radon mitigation strategies to control indoor radon levels.

Radon gas enters from the soil beneath the school through cracks and openings in the foundation. Air pressure inside a building is sometimes lower than pressure in the soil under the foundation. Because of this difference in pressure, a building acts like a vacuum, drawing radon inside from the soil. Typical cracks and openings include joints where the floor meets the wall, expansion joints in the floor, openings in the floor for pipes and wires, and hollow masonry walls that penetrate the floor.

EPA offers detailed guidance on radon testing, results interpretation and mitigation in schools. Also, the *IAQ Design Tools for Schools* document provides guidance on how to control radon in renovation and construction projects and how to manage radon risks during repair, renovation and maintenance of existing facilities.

**Framework for Effective School IAQ Management**



**Indoor Air Quality (IAQ)**

Interested in a firsthand story about radon? [Watch a video](#) featuring Janet McCabe, Deputy Assistant Administrator for the Office of Air and Radiation at EPA, as she talks about her personal experience with radon exposure.

## GAIN NATIONAL RECOGNITION FOR YOUR IAQ EFFORTS

Would you like to raise awareness about your IAQ management initiative or program? Does your school or district deserve recognition for its efforts? *IAQ Tools for Schools* offers two merit-based awards for schools and districts that are just beginning IAQ management. The [National Great Start Award](#) recognizes schools and districts that have taken the initial first step of identifying an IAQ coordinator and/or an IAQ management team. The [National Leadership Award](#) goes one step further — these schools and districts have ensured senior-level commitment to establish and maintain a sustainable IAQ program that embodies the [Framework for Effective School IAQ Management](#).

If you are interested in highlighting your school or district's commitment to IAQ, visit the [National Awards website](#) and complete the short application and narrative describing your current actions and future action plans for your IAQ management plan implementation. Applications for both awards are accepted year-round. Read the narrative excerpt below to learn how one school is making a difference by creating healthier learning environments for its students.

### Great Start Award Application Excerpt: Perkins School for the Blind, Watertown, Mass.

*"The Perkins mission is to provide education and services that build productive, meaningful lives for children and adults around the world who are blind, deaf-blind or visually impaired, including those with additional disabilities. The school understands that poor indoor air quality can affect the health and wellbeing of students and staff, and can lead to fatigue, a decrease in performance, poor attendance and asthma. The Perkins School's objectives are to: maintain optimum airflow by maintaining our ventilation systems; improve the quality of indoor air through preventative measures, including periodic inspections, routine maintenance and other IAQ measures developed through our IAQ plan; be able to react to IAQ concerns and issues quickly by organizing an IAQ team that understands these issues; and be able to resolve these problems in an efficient manner."*

For more information on how to apply for an *IAQ Tools for Schools* merit-based award, visit the [National Awards website](#). Applications are accepted year-round.

## HAVE YOUR QUESTIONS ANSWERED!

Is there a topic you want to see covered in an *IAQ Tools for Schools* Connector e-newsletter? Need more information or have a quick question? Do you have suggestions for a webinar, an e-newsletter feature, or are you simply curious about an IAQ topic and would like more information? If so, send us an email at [IAQTfSConnector@cadmusgroup.com](mailto:IAQTfSConnector@cadmusgroup.com).

Share YOUR news and events! Send us information to share with the school IAQ community. It could be featured in the next e-newsletter. Email your news to [IAQTfSConnector@cadmusgroup.com](mailto:IAQTfSConnector@cadmusgroup.com).

The *IAQ Tools for Schools* Program is a comprehensive resource to help schools maintain a healthy environment in school buildings by identifying, correcting and preventing IAQ problems. Learn more about the *IAQ Tools for Schools* Program at [www.epa.gov/iaq/schools](http://www.epa.gov/iaq/schools).